## ABSTRACT

Disclosed are compositions for mammalian, avian or piscian reproductive cells and methods for the collection, holding, processing, in vitro fertilization, sexing culturing, or storing (including long-term cryopreservation) of mammalian, avian, or piscian reproductive sperm cells. The compositions comprise a suitable reproductive cell media and a transforming growth factor, an insulin-like growth factor, or zinc, and, optionally, inositol, transferrin, or fructose, or combinations thereof.